

A rounding type edge 40 is shown on the top of 15 and a similar radius 45 is shown at the bottom of strip 15. A female die 50 with a protruding lip 55 is producing this rounding feature.

Fig. 3 is a mitered corner of a frame 60 with a clinched slug 25 in place in two slots 20.

A remnant 65, that is purposely left during mitering, holds the frame together until clinching of slug 25 can be done.

Fig. 4 is a fabrication sequence of a frame 70 with a plurality of 45-degree cuts.

A remnant 65 is left in three places. Punched holes 20 is shown in one corner with a slug 25 shown inserted in another corner to achieve secure joining.

#### Claims.

1. Butt-joining method comprising:

In two abutting metal strips punching a substantially rectangular slot into both abutments, inserting into said two slots a deformable slug, clinching it into said slots, thereby securely joining said strips.

2. Butt-joining method as defined in claim 1 wherein said slots in both said abutments are keystone shaped instead of rectangular.

3. Butt-joining method as defined in claim 1 wherein said slots in both said abutments have two rounded edges produced by both a punch and a die.

4. Butt-joining method as defined in claim 1 wherein said strips are of other material than metal.

5. Butt-joining method as defined in claim 1 wherein a plurality of slots are used.

6. Butt-joining method as defined in claim 2 wherein said keystone shaped slugs are also having said rounded corners